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THE COAL SHORTAGE.

This paper will be divided into two parts, the first of which will discuss the short-term problem, with forecasts of production, an estimate of the stock-building needed to prevent a recurrence of the industrial breakdown, a discussion of the necessary limits on inland consumption, and a section on coal export policy; the second article will deal with more long-term problems, such as the future size of the industry.

PART I. THE IMMEDIATE EMERGENCY

Table I shows the recent development of coal production and consumption.

TABLE I

U.K. Coal Production and Consumption, 1942–46.[*]
(millions of tons)

		1942	1943	1944	1945	1946[†]
Production.	Mined	204	195	184	175	180
	Opencast	1	4	9	8	9
	Total	205	199	193	183	189
Plus Stock decrease[‖]		—	—1[‡]	1	5	5
Total available		205	198	194	188	194
Less Exports and Bunkers		8	8	6	8	9
Inland consumption		197	190	188	180	185

(*Source :* Ministry of Fuel and Power Statistical Digest 1945. Tables 3 and 41, for 1942–5. Monthly Digest of Statistics, Jan. 1947.

[*] Some allowance should be made for the fact that recently the quality of coal has declined. [†] Provisional. [‡] Increase.

[‖] Stock changes in opencast coal on sites or special stock dumps are taken to be the difference between opencast coal produced (Table 3) and opencast coal disposals (Table 41), since changes in the opencast coal stocks shown as such (Table 45) are not the same as this difference, and therefore would lead to incorrect residuals for inland consumption.

This table shows how inland consumption has been maintained over the past two years at the expense of stocks. Total stocks, which were over 20 million tons at the end of 1941, 1942, 1943 and 1944, fell to 15.4 million at the end of 1945, and 10.5 million at the end of 1946. This destocking obviously cannot continue—the low level of stocks has been largely responsible for the past winter's dislocation.

To discover how much coal will be available for consumption this year, it is necessary to estimate first what total production will be, and then how much must be allocated to stocks, exports and bunkers. Table II shows recent movements in the factors determining the level of production of mined coal. ('Output per man-shift' will be abbreviated to ' OMS ' throughout).

TABLE II

Coal. OMS, Average shifts per week and labour force, 1943–46

Year		Overall OMS (tons)	Average shifts per wage-earner per week	Number of wage-earners (000)	Average wkly. production (mined coal only, million tons) *
1943	... ...	1.03	5.12	708	3.73
1944	... ...	1.00	4.96	710	3.52
1945	... ...	1.00	4.73	709	3.35
1946 1st qr.	... ...	1.02	4.87†	697†	3.48
2nd qr.	... ...	1.02	4.83	699	3.45
3rd qr.	... ...	1.01	4.64	698	3.27
4th qr.	... ...	1.05	5.01	692	3.63
1946 Total	... ...	1.03	4.84	697	3.46

Source : Monthly Digest of Statistics, January, 1947. Quarterly figures taken from monthly.

* Does not always agree with production calculated from cross-multiplication of the other columns, because of rounding.

† The method of recording wage-earners was changed at the beginning of 1946. The Digest states : ' The effect of this is to reduce the number on colliery books by approximately 2,500. . . . The effect of the change on the average number of shifts worked . . . is very small.'

Let us assume that production of mined coal in the first quarter of 1947 averages 3.60 million tons weekly; and that for the remaining quarters OMS is 5 per cent above 1946, average shifts per wage-earner per week are 4.75, 4.50 and 4.80 respectively,[1] and the estimated average labour force in the first quarter of 1947 (695 thousand) increases 10 thousand per quarter.[2] If we further assume that production of opencast is 10 per cent above 1946 throughout, we get the following production forecasts for 1947 :—

	Million tons
First quarter	49
Second ,, ...	49
Third ,, ...	47
Fourth ,, ...	52
Total*	197

*The ' Economic Survey ' target of 200 millions involves, therefore, more optimistic assumptions than those given above. The most uncertain factor is the effect on attendance of a 5-shift week. If we take the more pessimistic assumptions that there will be no overtime worked (so that in normal times the number of shifts ' possible ' is 4.9 per week, allowing for unpreventable closing), and that absenteeism wil be unchanged from last year's monthly percentages, the total production will only be about 179 million tons. This forecast should be considered, however, the lowest possible, since absenteeism is almost bound to fall if ' possible ' shifts are reduced. Whether overtime will be worked is not yet known.

[1] This involves the assumption that in normal circumstances some overtime shifts will be worked (making a weekly average of 5.4 shifts available) and that absenteeism will fall from about 16 per cent to about 11 per cent, with a shorter week, guaranteed holidays, etc., which is, perhaps, on the optimistic side.

[2] This is the rate of increase necessary if the ' Economic Survey ' target of 730 thousand men at the end of the year is to be achieved. It may be that new recruits will have a lower productivity than the average of the present labour force, being less proficient, but on the other hand as the labour force increases a greater proportion can work at the coal face, where OMS is high. We shall assume for this purpose that these two tendencies cancel one another, and that in the short period marginal productivity equals average productivity.

It is estimated below that stocks need to be at a level of approximately 18 million tons at the end of October, which implies a level of about 16½ million at the end of December, i.e. a net stock-building of 6 million tons during the year.

We can assume that exports, which accounted for about half 'Bunkers and Exports' last year, will be reduced slightly (although a large part goes to the armed forces, coaling stations, etc., and cannot be considered highly reducible), and that the total for this year will be 8 million tons.

We can now estimate the amount available for inland consumption in 1947:—

TABLE III

Forecasts of Coal Production and Consumption in 1947

(millions of tons)

Production.	Mined	187
	Opencast	10
	Total	197
Less Stock Increase		6
Total available		191
Less Exports and Bunkers		8
Inland Consumption		183

The amount available for coal consumers may therefore be less this year than last, the anticipated increase of production only covering re-stocking needs.

We shall now consider what policy is needed for production, re-stocking, consumption and export of coal, during the coming coal year (beginning on May 1st).

(*a*) PRODUCTION

Labour Force. It is of course desirable to solve the coal problem, so far as is possible by increasing production, rather than by restricting consumption. The first part of the solution is to attract the maximum number of recruits into the industry. This can be achieved most easily if the total productive national labour force is increased, whether this is done by reducing the numbers in non-productive employment, such as H.M. Forces, or by introducing foreign labour. Otherwise, recruits will have to be attracted from other industries.

In January, 1946, adult male miners' average weekly earnings were 123s. 5d. (including income in kind), as against average earnings of males in all industries of 114s. 1d.[1] This difference is probably not enough, even taken together with the shorter hours worked, to compensate for the notorious disadvantages of mining as an occupation. If we assume that the sons of miners would be roughly adequate to replace existing miners the net inflow from non-mining families must equal the number of miners' sons who do not enter their father's occupation, if a stable labour force is to be achieved when demobilisation of miners has ended. Since the miners' sons are in fact not entering the industry in great numbers, there must be a very considerable recruitment from non-mining families, for an increase in the labour force to be achieved. In view of the localisation of the industry, this means that mining wages and conditions must be extremely attractive if geographical frictions, as well as the industry's natural disadvantages, are to be overcome.

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[1] Ministry of Labour Gazette, July 1946. The margin may be lower now.

The attraction of coalmining must be made sufficiently great to achieve inward transfers of a high level over the short-period future (since juvenile recruits will almost certainly not offset natural wastage, and national service will not now provide a large net influx) unless there are accessions to the labour force through larger scale demobilisation or immigration than appears at present to be contemplated. The national need for coal reinforces the argument that in equity higher earnings should be paid to coalminers because of the darkness, dirt and dangers of work in the pits. As further inducements, housing, recreational facilities, extra rations and more canteens could be provided. In a high-wage economy workers seem to look increasingly for supplementary attractions of this sort; and money spent in these directions is probably, up to a point, well spent as a means of increasing the industry's attractions.

It is not only in the economic field that inducements are needed. The status of the industry in the public's esteem is an important factor for potential recruits, especially juveniles. It is by no means certain that the public as a whole knows the human cost of winning coal. The heroic element in mining must be more widely appreciated, if the industry is to appeal to the spirit of adventure in young recruits. All possible steps should be taken to acquaint the public with the prowess of the miners, who should be considered, as in fact they are, an occupational élite.

From strictly financial considerations such extra-economic inducements are very worthwhile. They increase the relative advantages of the industry in the eyes of those contemplating joining it, and also raise the élan of the existing labour force, without corresponding increases in wage-costs. Indeed by strengthening the loyalty of the miners, they may even increase productivity and lower wage-costs.

By one means and another, the uncertain and inadequate prospects offered by the industry before the war need to be replaced by a realisation that mining is a well-paid and important career.

Output per man. Under this heading we shall include influences both on OMS and on attendance. Technical developments clearly cannot help much to raise productivity in time to solve the immediate coal difficulties. In the present emergency, in fact, it is very difficult to obtain the non-productive periods during which coalwinning and haulage methods could be improved. Incentives to work are the main determinants of output per head in the short period.

It has been argued that miners have in the past been restrained in raising productivity by a feeling that coalowners would share the benefits of such an increase. Interest payments to ex-owners will still be a charge on production, but they will clearly be a prior charge unaffected by the scale of output. If the National Coal Board's accounts balance, as they presumably will over the long period, total wages (including welfare subsidies, etc.) will equal the difference between receipts and non-wage costs. The equity of the industry has in fact been transferred to the miners. Under these conditions, when output rises, wages will almost certainly rise in still greater proportion. This would fail to happen only if total average non-wage costs (including interest) did not fall as output increased (most unlikely in the circumstances) or if prices were reduced (which is probably undesirable at present, even if it were possible), or if the Board accumulated large reserves (which is not a necessary policy).

If the Board allows earnings to rise in this way, and there is certainly justification for such a financial policy as long as the critical coal shortage continues, the problem is to obtain the maximum incentive effect by bringing the miner to understand these possibilities of increasing his income. One way of achieving this would be to pay personal or group bonuses on weekly output. The necessary principles underlying bonus payments are that the more directly and obviously earnings can be made a function of each miner's own productive effort the better, and that higher attendance and more intensive output should be more than proportionately rewarded. Even if such incentive payments are not permitted by considerations of orthodox financial policy, to balance the Board's accounts is not of course an objective of greater importance than increasing coal production, and there is no over-riding reason why subsidies should not be paid, if these are considered necessary to make bonuses possible.

In any event, however mining wages are fixed, a generous supply of consumer's goods should be available for miners to buy with their wages. Otherwise the inducement to attend the marginal shift, or to apply the marginal unit of effort will be adversely affected, for if goods are not available in plentiful supply (at least approaching the level of total earnings), marginal earnings will only swell savings instead of raising living standards. The Government has announced its intention to increase the supplies of consumers' goods to mining areas, but apparently goods are not nearly in sufficient supply there yet. Mine canteens would seem to offer a method of distribution that would eliminate the difficulties of influencing the flow of supplies through trade channels, and would ensure that extra supplies do reach the miners.

In order to encourage work for savings as well, a subsidised superannuation scheme should be established, so that current effort will be rewarded by early retirement later, when we can better afford a loss of mining labour.

Such purely financial incentives are, however, only part of the solution. Other incentives can, and indeed, must be used. In the absence of the negative discipline of unemployment, more positive psychological incentives must be developed. The details may vary according to local circumstances, but the solution can only lie along the lines of increasing employee interest and, to a certain extent, participation in control. Even some loss of administrative efficiency may be worth while, if these positive incentives can be developed. In the appointment of executive personnel, or the introduction of new techniques, or the importation of foreign labour, the importance of obtaining employee approval cannot be overlooked. Apart from the general social benefits of good relations in the industry, the development of the miners' loyalty and co-operation is needed to replace the negative sanctions which have partly disappeared.

(*b*) RESTOCKING

In this section we shall consider the re-stocking that needs to be achieved if danger of a recurrence of the past winter's crisis is to be avoided, and an attempt will be made to draw up a re-stocking programme for the coming coal year. *Total* stocks at the end of the current coal year (at the end of April) can be estimated at about 7 million tons. Eleven and a half million tons can be taken as a target for the end of the next coal year, i.e., April 1948, which involves a net stockbuilding of 4½ million tons.

Making similar assumptions for production in the first 4 months of 1948 to those made above for 1947,[1] we can estimate an average weekly output of 4.13 million tons. This would give us a total of 203½ million tons for the coal year 1947–8. Four and a half million tons are needed for re-stocking and 8 million tons for minimal exports (assumed spread evenly over the year). This leaves 191 million tons available for inland consumption. If inland consumption had not been checked by a breakdown in supply, it would have been about 4.17 millions tons weekly in the first three months of 1947 and 3.80 million tons weekly in April. On this basis the total consumption in the 1946–47 coal year would have been 189 million tons. So re-stocking needs permit, on the basis of our production forecasts inland consumption at one per cent above the 1946–7 level (with consumption for January–April 1947 adjusted as above).[2]

This gives us the following possible development :—

STOCK PROGRAMME A—TOTAL STOCKS
(millions of tons)

		Production	*Total Consumption**	*Increase in Stocks*	*Stocks at end*
1947	May	15.9	14.9	1.0	8.0
	June*	18.5	17.2	1.3	9.3
	July	14.4	13.0	1.4	10.7
	August	13.1	12.6	0.5	11.2
	September*	19.6	17.5	2.1	13.3
	October	16.5	14.7	1.8	15.1
	November	16.6	16.0	0.6	15.7
	December*	18.9	20.7	—1.8	13.9
1948	January	15.7	17.4	—1.7	12.2
	February	16.5	17.4	—0.9	11.3
	March *	21.5	21.8	—0.3	11.0
	April	16.5	16.0	0.5	11.5

* 5-week periods. † Including Exports and Bunkers.

Footnotes 1 and 2 on page opposite.

This programme only allows a level of 15 million tons at the end of October. Since it is based on what is a rather optimistic forecast of production and takes no account of a possible acceleration in demand, it cannot be considered a safe programme. Let us adjust consumption so that 18 million tons are available at the end of October. To do so, it is necessary to restrict consumption to 97½ per cent of the 1946 level. This permits the building up of stocks as shown in Stock Programme B.

STOCK PROGRAMME B—TOTAL STOCKS

(millions of tons)

	Stocks at end
May	8.5
June	10.4
July	12.2
August	13.1
September	15.8
October	18.0

This assumes that domestic consumers will be receiving normal deliveries in the summer. If it is decided to restrict such deliveries, so as to prevent summer domestic consumption, and instead to stock coal on behalf of the domestic consumer, then the stock targets given above should be increased accordingly. The building up of industrial stocks may require either the use of Government dumps or a system by which stocks held by industries are retained under Government ownership and released under Government control, so as to prevent excessive consumption in the summer months.

The Government programme for the summer, announced by the President of the Board of Trade in the House of Commons debate on the 'Economic Survey' White Paper, envisages the growth of stocks from 5 million tons at the end of April to 15 million tons at the end of October. From the context it appears that this target refers to *distributed* stocks only. It is therefore quite compatible with Stock Programme B (if we assume that stocks at collieries and on opencast sites grow from 2 million to 3 million tons over the same period). Below are given interim targets for distributed stocks for the end of each summer month, these targets being implied by the Government's end-of-October target, the production and consumption estimates given above, and the assumption that of additions to total stocks a constant proportion (one-eleventh) is added to non-distributed stocks :—

[1] *i.e.* Labour force gaining slightly over 3 thousand a month, OMS 10 per cent above that for the first months of 1946, average shifts per wage earner per week 4.75, opencast output 20 per cent above 1946.

[2] Inland consumption follows a fairly steady seasonal pattern, as is shown by the following figures for the last three years (weekly averages, millions of tons).

	Jan.	*Feb.*	*Mar.*	*Apr.*	*May*	*June*	*July*	*Aug.*	*Sept.*	*Oct.*	*Nov.*	*Dec.*	*Whole year*
1944	3.97	4.00	3.93	3.49	3.62	3.37	3.22	3.00	3.37	3.62	3.85	3.85	3.60
1945	4.01	4.03	3.78	3.48	3.23	3.33	3.01	2.70	3.17	3.33	3.56	3.63	3.44
1946	3.90	3.89	3.94	3.42	3.53	3.26	3.08	2.96	3.32	3.50	3.82	3.93	3.55

(*Source :* Digest of Statistics).

Stock Programme B—Distributed Stocks
(millions of tons)

	Stocks at end
May	6.4
June	8.1
July	9.7
August	10.5
September	13.0
October	15.0

Any considerable deficiency in reaching the monthly targets of Stock Programme B would be a matter for some apprehension.

(*c*) Consumption

The previous section indicated the need for inland consumption, at least during the coming summer months, to be restricted to 97½ per cent of the 1946 level. The annual equivalent of this rate is 180 million tons,[1] and it is suggested that this should be set as the ' target ' consumption for the coal year 1947–8.

A saving of 5 million tons, in fact, must be effected. Fuel consumers can broadly be grouped in three categories : Essential industries (Steel, engineering, railways, export trades, etc.), Other industries, Domestic. There is still some possibility of economising fuel in essential industries, but there can be little doubt that as a whole their demands will be higher during the coming coal year. Therefore more than 5 million tons must be saved from the other two groups.

The critical decision is on which group the incidence of this saving must mainly fall. The difficulty about domestic rationing is that restriction beyond a certain point causes considerable hardship in particular cases, unless domestic consumers are themselves graded according to priorities (number of rooms, local weather, types of fuel available, etc.) and that in turn means considerable use of manpower in assessing priorities. The major decision is how to effect the best compromise between equity and manpower economy, having regard also to the claims of non-essential industries.

It was estimated in the report of the ' Beveridge Committee ' on coal, published in 1942,[2] that 10 million tons of coal a year could be saved by a rationing plan that would need 12,000 clerks, falling to 4,000 after 6 to 8 weeks. The first year would therefore involve the use of about 5,000 man-years of work (apart from that expended by the public in performing its share of the work).

This plan was not put into operation, and at present there is a basic household ration for each region, which can be supplemented in cases of hardship, and no rationing of gas or electricity. Under this system nearly 29 million tons of house coal were used in 1946. We can also estimate the coal equivalent of domestic electricity and gas. In 1945 rather over a quarter of all electricity produced was supplied to ' domestic and farm premises ',[1] and we can assume that the coal equivalent of domestic electricity in 1946 was 8 million tons (out of 26 million consumed altogether by electricity undertakings); and about 5/8ths of the gas produced was used by domestic consumers,[2] so that we can estimate 15 million tons as the coal equivalent of domestic gas in 1946. This gives us a total of 52 million tons[3] (excluding boiler fuel and miners' coal) for domestic coal consumption.

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[1] i.e. 97½ per cent of the consumption in 1946, 185 million tons. Note that we are now referring to the *calendar* year 1946. We are in fact basing consumption allowances for the last 8 months of 1947 on the consumption levels of the last 8 months of 1946, and those of the first 4 months of 1948 on the levels of the first 4 months of 1946.

[2] Cmd. 6364.

It is unlikely that there is still any possibility of saving 10 million tons, without considerable hardship. Perhaps 7 to 8 million tons is all that could be saved by a strict and comprehensive rationing scheme. This would involve a considerable use of manpower, and it implies that marginal domestic coal consumption is of less value than the output of non-essential products for which this coal would otherwise be used, either directly or in the form of steel, etc.

Fuel rationing is still a possibility, however. The 'Economic Survey' states that ' the Government will take effective and drastic measures to reduce non-industrial consumption of coal, gas and electricity '. Further statements by the President of the Board of Trade in the House of Commons also imply grading domestic coal consumption low in the order of priority amongst all uses of fuel. This amounts to a rejection of direct control over industrial production to ensure the most effective use of fuel—the case for which can be argued on other grounds than fuel economy.

It seems in fact that the fuel shortage offers an opportunity for comprehensive industrial planning. Any widely used raw material whose allocation is under Government control offers possibilities of influencing the structure of production, but coal, being almost universally used (either in raw or derivative condition) and being produced by a nationalised industry, offers unique possibilities comparable only to the planning potentialities implicit in the direction of labour. The allocation of fuel between different industries is almost a decision on the respective level of output to be permitted, and it implies some decision between the merits of different commodities. The decision to supply coal on a uniform quota, such as 30 per cent or 50 per cent of requirements, over a wide range of industries, would only be valid if the output per marginal unit of coal, by all these industries, was of equal value to the nation—a proposition it would be difficult to substantiate.

The coal shortage therefore indicates the need for enforcing concentration, or in some cases complete cessation, of production. The exact allocation can only be properly decided on the basis of a central economic plan, taking into account all resources (particularly fuel, imports and labour) and their alternative uses. But it is clear that luxury industries, and luxury production lines in industries, must suffer most drastic cuts. So must industries which are relatively highly coal-consuming, and firms whose fuel efficiency is low. On the one hand, therefore, highly fuel-utilising, unessential production should be curtailed (for example cars and domestic hardware for inland consumption), and on the other hand, such production as is maintained should be concentrated in efficient units (on a multiple shift basis, if necessary). This policy might cause some local unemployment, but in the present critical labour shortage, most of it would be rapidly absorbed elsewhere. Some extra labour would in fact be absorbed in essential industries, thus helping to correct labour maldistribution.

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[1] Ministry of Fuel and Power, Statistical Digest, 1945. Table 71.

[2] *Ibid.*, Table 60.

[3] Compared to about 57 million tons in 1938, 56½ million tons in 1942.

There is quite clearly, on general grounds, a need for re-distributing the country's resources between industries. In the short-term future coal will obviously be in shortest supply of all important materials, and the main principle determining the structure of production should be to get the maximum value from coal utilisation, with producers whose utilisation is highly efficient, taking both technique and the nature of their products into account, being guaranteed more or less full requirements, and others bearing the deficiency, if any.

While such re-organisation would mean more efficient use of coal, in terms of the production of domestic necessities and goods for export, it does not follow that less coal in quantity would be used. In fact, in as much as this re-organisation involves a shift from service industries to ' heavy ', there might even be increased demand for coal. We can perhaps assume that on balance, provided concentration of production is undertaken simultaneously with redistribution of labour, there will be neither savings nor additional requirements in industry.

The ' austerity ' implied in this programme might be unpalatable, but it must be compared with the alternative costs of reducing essential production, failing to restock adequately and ' drastic ' rationing. The required saving of 5 million tons could be achieved by paring down the household coal allocation further, by banning space heating in summer, and by applying a penal surcharge on all domestic consumption of gas and electricity over a certain percentage of that consumed in a base period (with appropriate allowances for changes in circumstances). If, however, elimination of non-essential industry is rejected, as seems likely, more drastic domestic rationing is probably preferable to the other alternatives.[1]

(*d*) Exports

Sections (*b*) and (*c*) above indicate for the coal year a net restocking of 4½ million tons and inland consumption of 180 million tons. Minimal exports

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[1] The Government's ' plan ' for the summer treats industry as the residual consumer, and envisages a heavy fall in industrial output, partly at the expense of essential production. Comprehensive domestic rationing is only to be used as a last resort. If the level of production for the summer months were to be only 89 million tons (compared with 94 millions for the same months of 1946) as suggested by the President of the Board of Trade, the case for more direct planning of industry would be stronger still. An increasing attempt is apparently being made to discriminate between industries according to the overall priority of their products, but not between firms of varying degrees of efficiency, nor between different types of output within an industry. With part of industry working short-time it may be difficult to achieve the necessary stock-building.

(including bunkers) are taken to be 8 million tons. Should production for the coal year fail to reach the total of these requirements, 192½ million tons, imports will have to be considered. To allow inland consumption to fall below 180 million tons would involve more hardship or industrial dislocation (or both) than the circumstances warrant. If a substantial deficiency appears likely (and it would be shown by stocks failing to reach target levels), importation of coal should be planned.

It is difficult to forecast movements in U.S. prices but the landed cost of U.S. coal to the Government next autumn might be of the order of 10 dollars per ton. A 5 million ton deficiency would cost, therefore, about $50 million. It might be better policy to make up a deficiency this way than to impose very drastic rationing schemes or a fall in essential production, comparing it with alternative uses of dollars.

Making 'pessimistic' assumptions about what attendance will be after the 5-shift week is established,[1] output for the coal year might be as low as 176 million tons. On the other hand, on the basis of the forecasts above, it will be about 203½ million tons. This would make a surplus available after the end of October. On our plan a destocking of 6½ million tons can be permitted during the second half of the coal year. Production is forecast at 105½ million tons for this period, giving us as the total coal available 112 million tons, compared with 97 million tons needed for inland consumption (calculated on the basis of a presumed annual level of 180), and 4 million tons for minimal exports.

This indicates a possible surplus of 11 million tons for use either in relieving restrictions on inland consumption or for exports.[2] While it has been suggested that inland consumption should not be allowed to fall much below an annual level of 180 million tons, there are also grounds for thinking it should not be permitted to rise much above it.[3] The case against non-essential industrial or domestic uses is that we cannot afford them in the present condition of the economy, taking all considerations (fuel, balance of payments, investment needs) into account. This would apply even if fuel were not a 'bottleneck', and consequently any surplus of coal above essential requirements should be considered a potential export. A surplus of this order (at an export price of £2 to £3) would contribute materially to easing our exchange difficulties, besides adding to the country's strength in diplomacy.

The possibilities of exporting coal are in fact greater than is here indicated. A large proportion of any increase in the labour force can go to the coal face, where output is nearly 3 tons per shift. After a delay for training, each recruit can, therefore, be considered to have a potential OMS of something like 1½ tons,[1] so our production estimates may turn out to be on the low side (since the assumption was made that marginal OMS equalled average OMS).

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[1] Similar to those made above in footnote to Table II above.

[2] Another use might be further stockbuilding to meet unexpected contingencies.

[3] This assumes that production is so planned, by concentration in efficient units, that there is Full Employment and no short-time working at a level of consumption of 180 million tons. In the absence of specific planning of production this will not happen, and extra coal may well be better used in industry rather than exported. Similarly, in these circumstances, imports might be considered rather than a fall in essential output, even though inland consumption is higher than 97½ per cent of that in 1946.

Moreover, it might not be impossible, if suitable inducements were offered, and the full co-operation of the working population obtained, to expand the labour force more rapidly even than the Government plans. One and a half tons per man-shift is equivalent to over 350 tons a year, and valued at 50s. per ton, this means nearly a thousand pounds' worth of foreign exchange (apart from the diplomatic value). It is doubtful whether marginal productivity in other export industries is as high. Every extra thousand miners, on this basis, can supply annually nearly a million pounds' worth of foreign exchange (and marginal productivity might be even higher as the labour force increases further). This emphasises the need to increase the labour force and to provide additional incentives.

The following are the main points which have emerged from this discussion. Production increases should be made a top priority. Re-stocking should have first claim on production. Consumption should be held down to 97½ of the 1946 level, which involves either direct planning of industry or strict domestic rationing. Since our real demand for coal is probably highly inelastic (at about this level), the consumption target should be considered rather inflexible.

The residual is foreign trade. Imports should be used in an emergency to make up for deficiencies of production, and if stocks mount to well over the safety margin, exports should be considered as an alternative to increasing home consumption.

D. Seers.

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[1] While the average number of miners fell from 782 thousand in 1938 to 709 thousand in 1945, the average number of surface workers only fell from 162 thousand to 159 thousand (Ministry of Fuel and Power Statistical Digest, 1945), which suggests that the surface labour force would tend to be almost constant as the labour force expanded, and that the majority of new recruits could go below ground. The average OMS of all below ground is 1.4 tons.

ECONOMIC PROSPECTS AND THE RISK OF INFLATION IN SWEDEN

General Outlook

During the last half-year the discussion in Sweden on economic policy has centred around the danger of inflation. Although this danger is probably less acute in Sweden than in many other countries, there are indications that the pressure exerted by a too-rapid increase in purchasing power has caused increasing difficulties in the control of Swedish prices during the past year. This paper has therefore been especially concerned with an analysis of the significance of such inflationary tendencies. An analysis has been made of the forces underlying the general economic expansion during the years 1945 and 1946 ; the evidence provided by this analysis has been used as a basis for formulating estimates of possible courses of economic development during 1947. These estimates are of course merely hypothetical and should not be regarded as forecasts.

A rapid expansion has taken place since the summer of 1945 in nearly every sphere of the Swedish economy. A comparison between the years 1945 and 1946 shows that private consumption has increased by 13 per cent, private investment by 20 per cent, and the value of exports by 40 per cent. Only government expenditure has shown a decrease, mainly because of a reduction in military expenditure. According to Table 1, the total gross expenditure—being the sum of these items—has increased from 20,900 to 23,400 mill. Kronor. or by 12 per cent. In the private sector of the economy the increase was 17 per cent. This shows that the cut in government expenditure has had the effect of considerably slowing-down the general expansion, as was evidenced by a surplus of current income over current expenses in the State Budget of about 200 mill. Kronor for the fiscal year 1945–46.

Table 1

Gross Expenditures for Different Purposes 1945–1946.

Mill. Kronor

	1945	1946	Increment
Private consumption	12,149	13,719	+ 1,570
Private gross investment	2,771	3,306	+ 535
Export	1,756	2,500	+ 744
Total private gross expenditure	*16,676*	*19,525*	*+ 2,849 (+17%)*
Governmental consumption	2,555	2,297	— 258
Governmental gross investment	1,660	1,614	— 46
Total governmental gross expenditure	*4,215*	*3,911*	*— 304 (— 7%)*
Total Expenditure	*20,891*	*23,436*	*+ 2,545 (+12%)*

The increase in consumption since 1943 has resulted in an almost complete restoration of the pre-war ratio between consumption and gross national product; this ratio was 60 per cent. in 1943 and 67 per cent in 1946. At the same time the proportion of income saved has shown a declining tendency. The annual rate of increase in savings deposits held by the banks has been slowing down during the last three years.

The rapid increase in the demand for goods and services since 1945 corresponds—very largely at any rate—to a real increase in supply. This increase in supply was derived from three main sources: an expansion of imports, an increase in the amount of labour available for civilian production, and an increase in productivity. During the first half of 1945 the Swedish economy was cut off from nearly all imports. Compared with 1945, the increase in the value of imports in 1946 amounted to about 2,200 mill. Kronor. Only part of this sum, however, was directly available for ultimate disposal (corresponding to the expenditure figures given above), because the rise in production and in the volume of sales has probably increased inventories mainly in the form of 'goods in process.' The rise in civilian employment since 1945 was the result of demobilization (see below) and the settlement of a labour dispute in the engineering industries, which had lasted from February to June 1945. Our knowledge of the development of productivity is very vague. Certain factors indicate a considerable increase: the rising volume of production and trade, the increased supply of important raw materials, and a higher standard of efficiency due to large investments in new machinery. On the other hand the serious shortage of labour and its great turnover have implied a tendency to decreasing efficiency in certain industries. The great pressure exerted by increasing demand has given rise to a large accumulation of orders in several industries (especially in engineering and iron works), involving long delays in delivery and bottlenecks in production.

It is not possible merely on the basis of these facts to arrive at any definite conclusions as to the real increase in the supply of goods. Certain symptoms of inflation have shown, however, that during 1946 total demand has tended to increase more rapidly than total supply. One such symptom was the increase in orders on hand, another the continued decrease in stocks of finished products (*e.g.* textiles, shoes, pottery, certain building materials, etc.). The consumption of these commodities has evidently been larger than the current supply from production and imports.

A very important question is how far the inflationary pressure has resulted in an upward movement of prices. The official price index numbers show great stability; the cost-of-living index has been stable since the introduction of the price-ceiling decree in November 1942. The rise in wages (by about 15 per cent in industry during the last two years) combined with the general pressure from the demand side resulted without doubt in a certain concealed rise in the level of prices outside the field of strict control. Entrepreneurs have, to some extent, taken up new lines of production when costs have gone up and prices have been fixed, and the new commodities produced have often been more expensive than the old ones. Recent Swedish experience seems to indicate that one consequence of a price-ceiling policy at a time when costs of production as well as demand are expanding rapidly is a tendency for production, employment, and wages to rise more in small firms than in large firms.

The expansion of income and expenditure during the years 1945 and 1946 has resulted in a rapid increase in imports (see below). A deficit of about 350 mill. Kronor in the current balance of payments arose during 1946, whereas 1945 showed a considerable surplus.

PROSPECTS FOR 1947

Economic development in 1947 will be determined by the following factors. The scarcity of labour is likely to lead to a further rise in wages and, in consequence, to a continued expansion of consumer's demand. Expenditure on consumption may actually show a somewhat larger percentage rise than total income. Anticipated investments by industry during 1947 are, according to a special investigation, much above the actual volume of investments during 1946. The shortage of building materials and the control of building will, however, considerably limit expansion in this respect. The volume of exports will be restricted by the great scarcity of raw materials (timber, paper pulp, steel) and labour so that no significant increase can be expected. A certain rise in government expenditure seems likely. In view of the fact that for practical purposes a general condition of full-employment is now considered to prevail in the Swedish economy no significant increase in employment in 1947 in possible. Opinions vary as to whether or not there will be a general increase in productivity during 1947. An important factor in this respect will be the volume of imports in 1947. If no general increase is possible, especially of important raw materials and fuel, there is no likelihood of any rapid increase in productivity. In any case, a situation of over-employment is not favourable to a rapid increase in productivity at the present time. A fairly optimistic hypothesis would presume the same general increase in the real gross national product per capita as the average recorded during the decade before the war, that is, 2-2.5 per cent per annum. The likelihood of a rapid increase in the demand for goods and the obstacles to a corresponding increase in home supply indicate the possibility of a large import surplus during 1947. But Sweden's current foreign exchange position will not permit a continued growth of the trade deficit and, as already mentioned, the volume of exports is unlikely to increase considerably during 1947, and the foreign exchange position will be weakened by further lending.

Some hypothetical figures have been included in a table below for the purpose of giving some quantitative precision to the previous discussion of economic trends for 1947. It is expected that a general increase in money income of from 8—10 per cent during 1947 will be followed by a 10—12 per cent increase in the value of consumption. Government control of investments will, according to our assumptions, limit the expansion of private investments to an increase of 10 per cent. The increase of expenditure by state and other official bodies is put at 200 million Kronor. The volume of exports will probably be maintained at a constant level. On the supply side, the effect of an increase in productivity from 1946 to 1947 will be partly offset by a decrease in the volume of imports, which will be necessary in order to regain equilibrium in the balance of payments. A larger import surplus, involving a further drain of Sweden's exchange reserves, would, of course, ease the supply position to a corresponding extent. The following table presents the assumed movements in aggregate demand and supply.

	Increase in demand (in mill. Kronor)		Increase in real supply (in mill. Kronor)
Private consumption	1,500	Increase in production	500
Private investment	300	Decrease of imports	– 300
Export	0		
Public expenditures	200		
Total	2,000	Total	200

The conclusion to be drawn from this hypothetical analysis is that the inflationary pressures may increase considerably during 1947. The hypothetical character of the analysis must be stressed. It is not possible to assess in advance the precise effect of an inflationary pressure on actual developments, *i.e.* the extent to which it will lead to a rise in prices, a diminution of stocks, or a dislocation of production. Also economic policy might effectively change and modify current tendencies of investments, savings, consumption and prices. Another very important reservation relates to the unpredictable nature of future international development, especially with respect to business conditions in the U.S.A. If prices were soon to become stabilized in the U.S.A., or more important, were there to be some deflation in that country, the risk of inflation in Sweden would be undoubtedly considerably reduced. The great importance of international trade to Sweden's domestic economy makes the price structure in Sweden very sensitive to movements in international prices.

EMPLOYMENT AND WAGES

Full employment now prevails in the Swedish labour market. The 180,000 men released from military service from August 1944, to the middle of 1945, were absorbed without any difficulty. Total civilian employment in 1944 amounted to about 30,000 persons less than before the war. Total employment in the middle of 1946 exceeded that of 1939 by about 150,000 persons, or 5 per cent of the working population. The increase in the size of the working population in Sweden since 1939 resulted from: an increase in the number of persons in the productive age groups, a decrease in unemployment, and immigration. These three factors can not be expected to play the same rôle in the coming years. Owing to the decline in the birth rate in the interwar period, the size of the productive population can not be expected to continue to increase during the next ten years. Unemployment among trade union members has gone down from an average annual rate of 9 per cent in the boom year of 1939 to 4.5 per cent in 1945 and 3.5 in 1946. A further decrease is hardly possible, owing to seasonal fluctuations; in September

1946, the rate of unemployment was as low as 2.1 per cent, a minimum that has never previously been reached.

Agriculture has been an important source of labour supply for the urban industries, and a steady decline in the size of the agricultural labour force has been taking place. As will be seen from Table 2, which presents changes in the demand and supply of labour since 1939, the manufacturing industries have benefited more from the increase in the urban labour supply than other non-agricultural trades.

TABLE 2.

Labour Market Balance Sheet for Urban Industries, 1939–1946.

Supply		Number of persons	Demand	Number of persons
			Increment of employment in :	
Increment in total productive population		55,000	Mining and manufacturing	135,000
Reduction in unemployment		45,000	Handicraft	35,000
Immigration		50,000	Building	5,000
Decline of employment :			Transport	15,000
(*a*) in agriculture	70,000		Trade	35,000
(*b*) domestic work	25,000	95,000	Government and professions	20,000
Total		245,000	Total	245,000

In the building trade, employment in 1946 exceeded that of 1939 by only 5,000 men; thanks to an active policy of ironing-out the seasonal fluctuations, the actual volume of employment (i.e. the number of days worked) may have increased by 20 per cent.

Full employment has been pushed so far that many employers report a considerable shortage of labour. Members of the Employers' Federation estimated that in the summer of 1946 this shortage amounted to about 10 per cent. of their requirements for male workers and 17 per cent for female workers. The total labour shortage for the manufacturing firms covered by this investigation amounted to about 50,000 workers. As a result of its yearly investigation into industrial investments and investment plans, the Board of Trade arrived at roughly the same conclusion. It is of special interest to note that the manufacturing firms included in this investigation, employing about 400,000 persons, had made in 1946 and were planning for 1947 real investments that would require a further increase in their manpower of about 20,000 workers a year. In view of the stagnation in the growth of the productive population, difficulties will probably arise in procuring that number of workers.

Full employment has considerably increased labour turnover. An investigation carried out in the summer of 1946 revealed that during each month 4—5 per cent of the male workers and about 6 per cent of the female workers left their jobs at their own request. Such a rate of turnover may involve some loss in productive efficiency.

The keen competition for workers among employers has tended to accelerate the general increase in money wage rates. The actual rise in wage rates from 1945 to 1946 exceeded the upward adjustments provided for in the collective agreements. For example, the 3—4 per cent wage increase in the manufacturing industries, provided for by collective agreement, was followed by additional wage increases granted by the employers so that the total increase in wage rates amounted to about 8 per cent.

Finally, some figures are given to reveal movements in total earnings (Table 3). The total wages of labour in manufacturing industries rose by 19 per cent between 1945 and 1946; the increase in agricultural wages was somewhat less. The wage bill in forestry was actually lower in 1946 than in 1945. Total wages earned in the private sector of the economy are estimated to have increased by 13.5 per cent in 1946 as compared to 1945.

TABLE 3.

Trend of Wages Bill, 1939–1946.

Mill. Kronor

	1939	1940	1941	1942	1943	1944	1945	1946	Increment in per cent.	
									1945–6	1939–46
Manftg. workers	1,414	1,461	1,566	1,823	1,973	2,073	2,166	2,618	20.9	85.1
Buildg. workers	495	303	307	379	452	493	551	633	14.9	27.9
Agri. workers ...	288	303	327	370	396	413	450	467	3.8	62.2
Forestry workers	144	206	262	259	323	271	359	300	−16.4	108.3
Salaried empl. in pte. ind. ...	484	517	568	648	708	772	845	948	12.2	95.9
Total ...	2,825	2,790	3,030	3,479	3,852	4,022	4,371	4,966	13.6	75.8
Index ...	100	99	107	123	136	142	155	176		

INVESTMENTS

During 1946 public and private investments have shown divergent trends. Although the former declined appreciably from 1945 to 1946, a new rise of governmental investments is expected for 1947. Private investments have expanded considerably during 1946. In towns with more than 10,000 inhabitants the housing situation has deteriorated during 1946 in spite of a 13 per cent rise in the number of new dwellings completed. In rural districts, where building restrictions are less severe, the increase of new dwellings seems to have been comparatively greater.

TABLE 4.

Investment (past and planned) of Manufacturing Industries, 1945–1947.

Mill Kronor.

	Machines	Construction	Total
Investment, 1945	236.9	310.1	547.0
Estimated increase, 1945–46	+134.7	+158.7	+293.4
Planned increase, 1946–47	+104.8	+334.8	+439.6

Manufacturing industry had planned an 80 per cent increase in investment for 1946; a preliminary report has revealed that the actual increase amounted to about 50 per cent. The investment plans of manufacturing industry for 1947 contemplate an additional 50 per cent increase in the volume of investments. This rate of expansion may be curtailed, at least with respect to new construction, by a restriction of building permits.

FOREIGN TRADE

The value of imports continued to rise during 1946 though at a diminishing rate. The average monthly value of imports during the year was about 275 mill. Kronor, imports reaching a value of 327 mill. Kronor in October and 345 million in November. The monthly value of exports estimated at about 200 million Kronor per month has not attained the high level of the autumn of 1945, when large stocks of wood and wood-pulp products were exported.

Thus the import surplus for 1946 will probably exceed 800 mill. Kronor. The deficit on current account is estimated at 350 mill. Kronor.

Part of the export trade has been financed by credits granted by the Swedish Government to several European countries, *e.g.*, the other Scandinavian countries, France, Belgium, and the Netherlands. The export surpluses arising from trade with these countries have been more than counterbalanced by large import surpluses in the trade between the American Continent and Switzerland. The import surplus from the United States alone amounted to 515 mill. Kronor for the months January–October.

The volume of imports returned to pre-war levels in the second and third quarters of 1946. The import of coal and coke, however, was still only half of the pre-war volume. The world scarcity of necessities and the comparatively high level of income in Sweden have led to a greater import of non-essential and luxury goods than before the war.

Konjunkturinstitutet,
Stockholm.

E. LUNDBERG.

RECONSTRUCTION IN EUROPE

An Investigation by U.N.O.

The implications of the change in name and the replacement by the Economic and Social Council of the United Nations Organization of the former Economic and Financial Section of the Secretariat of the League of Nations is to some extent reflected in a recent Report[1] of the Temporary Sub-Commission on Economic Reconstruction of Devastated Areas which was established by the Economic and Social Council in June 1946. Thus, problems of reconstruction are not considered as primarily financial and, amongst the numerous recommendations of the Sub-Commission, it is difficult to find one reminiscent, either in spirit or form, of the resolution on Austria proposed to the League of Nations in 1923 in which Austria was required to draw up ' within a month . . . a programme of reforms and improvements, to be realised by stages and designed to enable Austria to re-establish a permanent equilibrium of her budget within two years '.

According to its terms of reference the Sub-Commission was to advise (*a*) on the nature and scope of the economic reconstruction problems of those countries which face great and urgent tasks in this field, whether by reason of occupation or physical devastation, and (*b*) on the progress of reconstruction and the measure of international co-operation by which reconstruction in those countries might be effectively facilitated and accelerated. The Sub-Commission set up two Working Groups, one for Europe and Africa, and one for Asia and the Far East, Owing to the great amount of work in connection with Europe it was decided to concentrate on the European Working Group first, and to postpone the report on Asia and the Far East. The Working Group for Europe and Africa in its turn set up three Sub-Committees, for Western Europe, Eastern Europe, and Southern Europe and Africa (Ethiopia only) respectively and these Sub-Committees sent out Field Teams into some of the countries under review.

War Damage and Dislocation

Although these sub-divisions were largely unavoidable in view of the scope of the report, they probably contributed to the fact that data on particular countries are often completely unrelated and not comparable with each other, or any pre-war year. It is clear from the Report that the Sub-Committees had no guidance as to exactly what information was wanted, and that they proceeded to get all the data they could. In view of this it is difficult to assess on a comparable basis the degree of destruction caused by the war in the various parts of Europe. For some reason Sweden is also included in the Report. By combining some figures and indices given in the Report we obtain Table 1, which must be taken with the greatest caution ; the U.S.S.R. is omitted because of insufficient data which are shown without a pre-war basis of comparison.[2]

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[1] United Nations Economic and Social Council. Preliminary Report of the Temporary Sub-Commission on Economic Reconstruction of Devastated Areas, July-September, 1946.

[2] Some of the data on the U.S.S.R. were given by M. H. Dobb, ' Post-war Economic Prospects in the U.S.S.R. ' Bulletin, Vol. 8, No. 6.

TABLE I. *Some estimates of the state of the European economy in 1945 (pre-war=100).*

Country	Nos. of livestock	Agricultural production	Industrial production	Shipping G.R.T. (Feb. '46)	No. of Locomotives	Value of national capital	No. of population	No. of buildings
Belgium ...	88	57	33	57	40	85	99	90
Bulgaria ...	75	95	87[1]	N.A.	N.A.	N.A.	—	N.A.
Czechoslovakia...	81	61	53[2]	N.A.	N.A.	N.A.	—	N.A.
Denmark ...	90	99	65	65	102	93	105	N.A.
Finland ...	N.A.	61	51	N.A.	N.A.	N.A.	—	N.A.
France	75	51	44	41	59	N.A.	96	80
Greece	57	59	30[1]	29	20	75	—	77
Hungary ...	34	55	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Italy	79	53	80[2]	8	60	N.A.	N.A.	N.A.
Luxemburg ...	82	65	49	N.A.	N.A.	N.A.	106	69
Netherlands ...	83	60	N.A.	55	N.A.	N.A.	106	83
Norway ...	81	68	43	60	100	82	N.A.	92
Poland	25	N.A.	77[2]	100	58	N.A.	83	65
Rumania ...	64	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
Yugoslavia ...	45	60	35[1]	43	24	N.A.	N.A.	79

[1] Textiles. [2] Steel.

Note:—' Pre-war ' means either 1935–8, 1939, 1940 or ' normal ' ; in the case of Poland it also means the comparison between 1939 and 1945 boundaries. The index of livestock is an unweighted average of indices of the number of horses, cattle and pigs as shown in Table 2 ; the index of agricultural production is an unweighted average of indices of quantities of bread and fodder grains, potatoes and sugar beet, as shown in Table 3. Because of the lack of a general index of industrial production in some countries, the index for textiles is shown in the case of Bulgaria, Greece and Yugoslavia, and the index for steel in the case of Czechoslovakia, Italy and Poland ; these indices should, of course, be taken as illustrative and not as representative of industry as a whole.

TABLE II. *Numbers of livestock in some European countries, 1945 (average 1935–8=100).*

Country	*Horses*	*Cattle*	*Pigs*
Belgium	111	93	60
Bulgaria	92	70	63
Czechoslovakia	90	88	64
Denmark	115	102	52
France	72	91	62
Greece	64	59	49
Hungary	34	37	32
Italy	79	85	74
Luxemburg	87	101	59
Netherlands	116	84	50
Norway	111	91	41
Poland	31	31	14
Rumania	56	86	50
Yugoslavia	43	46	47

TABLE III. *Production of agricultural crops in some European countries 1945 (quantities, average 1935–8=100).*

Country	*Bread grains*	*Fodder grains*	*Potatoes*	*Sugar beet*
Belgium	53	63	39	75
Bulgaria	77	74	217	18
Czechoslovakia	68	59	58	61
Denmark	93	103	121	—
Finland	67	61	66	50
France	53	55	49	49
Greece	51	48	79	—
Hungary	29	76	94	22
Italy	57	53	89	15
Luxemburg	57	82	55	—
Netherlands	47	67	97	31
Norway	114	74	115	—
Yugoslavia	35	67	60	79

By grouping the above countries roughly according to the degrees of destruction caused by the war, we obtain the following divisions (in alphabetical order within the three classes):

1. Greece, Hungary, Poland, Yugoslavia.
2. Belgium, Czechoslovakia, Finland, France, Italy, Netherlands, Norway, Rumania.
3. Bulgaria, Denmark, Luxemburg.

The degree of war damage has probably had some influence upon the degree to which the various countries found it advisable to elaborate their economic plans. Apart from the U.S.S.R., Hungary, Italy and Yugoslavia also intend to develop overall economic planning. Czechoslovakia, France, the Netherlands and Poland announced short-term production targets for important industries. Belgium, Denmark, Finland, Luxemburg and Norway seem to have reached reasonably clear definitions of the general directions which they wish their internal economy and their foreign trade to follow, but those intentions are not laid down in the form of comprehensive economic plans. Bulgaria, Greece and Rumania have not yet developed any clear-cut economic policies for the reconstruction period ; they are evidently still in the emergency stage of the post-war period.

RECOVERY : SIGNS AND OBSTACLES

Although it is difficult to give any precise or comparable data for most European countries, it is clear from the Report that there was a general improvement in the economic situation in the first half of 1946. Some data in this respect are shown in the table below.

TABLE IV

Industrial Production in some European Countries in 1945 and 1946.

(1939=100)

Country	*July 1945*	*February 1946*
Belgium	33	69
Denmark	65	89
Finland	51	59
France	44	73
Norway	43	91

Industrial production is affected by the general shortage of coal which is partly due to transport and partly to the low output, which in Europe in June 1946 (excluding Germany but including U.S.S.R.) was still only about 72 % of pre-war. Coal production was lower because output per shift has fallen, because miners are short of food, because there are fewer recruits and because of the destruction and lack of maintenance of machinery. Shortages of raw materials are serious obstacles to recovery in many cases ; there is a lack of timber, hides, industrial fats and oils, lead, zinc and tin.

One of the main bottlenecks in industry is the lack of machinery and equipment, and one of the contributing factors, apart from the shortage of foreign exchange, steel and skilled labour, is the shortage of German-made spare parts. The disruption of economic ties with Germany in general, of great importance to some countries before 1939, is one of the contributory causes of the unsettled state of affairs, *e.g.* in the Netherlands. Norway has a similar problem caused by the fact that pre-1940 overseas importers of Norwegian goods are now self-sufficient. But these factors should be considered as indirect consequences of the war and perhaps even as a normal economic development and not classified as war damage or devastation.

On the other hand, the particularly acute shortage of skilled workers which prevails everywhere in Europe should in large part be attributed to the war ; the neglect of training during the war is aggravated now by the difficulties encountered in a number of countries in the training of young workers because the generations who would have taught them have been wiped out. There is also plenty of evidence of a general labour shortage (particularly noticeable in Belgium, France and Czechoslovakia), a phenomenon hitherto unknown in Europe and one which may continue in the years to come if the majority of European countries are seriously going to undertake the task of utilization of all or most of their available resources. Economic policy apart, the general labour shortage is due to :

(1) the abnormal increase in the number of persons engaged in the distributive trades in the recent war (Greece, Yugoslavia, Poland, Hungary, Italy);

(2) the inability to withdraw quickly the agricultural surplus population from the land;

(3) the large decrease in the productivity of labour, which in turn is caused by the deterioration of equipment, by the accummulated effects of malnutrition during the war and by the practice of go-slow developed during the German occupation.

The recovery in agriculture, similar to that in industry, was far far from being sufficient for the immediate needs of Europe.

Indeed, the Report stresses the fact that UNRRA deliveries had been of decisive importance in some of the worst devastated areas in preventing famine and in promoting the first steps in rehabilitation. Although European agricultural crops, which decreased to less than 60 per cent of pre-war in 1945, were expected to reach 80 per cent during 1946, about 100 million people in Europe were still being fed at the beginning of the summer of 1946 at a level of 1,500 calories or less a day, and about 40 million at between 1,500 and 2,000 calories. The decrease in agricultural production was caused by the decline in yield in areas under cultivation due to lack of fertilisers and manure, shortages of seeds, pesticides, veterinary supplies, agricultural machinery and draught power. Europe, as is shown in the table below, will still in 1947 need large food imports from overseas.

TABLE V

Indigenous Food Supplies of some European Countries in 1946–47.[1]

	Calories per head per day
1. Denmark, Hungary, Sweden	Over 2,800
2. Bulgaria, Czechoslovakia, Rumania, Yugoslavia...	2,300—2,800
3. France, Netherlands, Spain, Switzerland	1,900—2,200
4. Finland, Germany, Italy	1,600—1,900
5. Austria, Belgium, Greece, Norway, Poland	Under 1,600

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[1] Preliminary Report, p. 38. The above figures were provided by the U.K. Ministry of Agriculture and refer to the calorific value of indigenous food supplies in 1946–47 resulting from the estimated harvest. They would require, of course, some adjustments in the light of the actual harvest results in the various countries, *e.g.* the bad crops in Hungary.

INTERNATIONAL TRADE

The urgent demand for the exchange of goods between European countries and the existing very limited stocks are the causes of a tight control of foreign exchange movements and of foreign trade. The results are a multitude of ' bilateral ' or rather barter agreements providing for the exchange of specified goods of specified values, though almost all European countries declare their readiness to return as soon as possible to multilateral patterns in the intra-European trade, now almost non-existent. Table 6 shows the number of agreements concluded in Europe in 1945–46.

TABLE VI

Bilateral Agreements in Europe on 10th September, 1946

	Austria	Belgium	Bulgaria	Czechoslovakia	Denmark	Finland	France	Greece	Hungary	Italy	Netherlands	Norway	Poland	Portugal	Rumania	Spain	Switzerland	Sweden	Turkey	U.S.S.R.	Yugoslavia	Total
Austria				×			×			×						×						4
Belgium				×	×	×	×		×	×	×	×	×	×		×	×	×			×	14
Bulgaria				×									×		×					×		4
Czechoslovakia	×	×	×		×	×			×			×			×		×	×	×	×	×	13
Denmark...		×		×		×	×		×	×	×	×	×			×	×	×		×		13
Finland		×		×	×		×				×	×	×				×	×	×	×		11
France	×	×			×	×		×	×	×	×	×	×		×		×	×		×	×	15
Greece							×												×			2
Hungary		×		×	×		×						×		×		×	×		×		9
Italy	×	×			×		×									×	×	×				7
Netherlands		×			×	×	×					×		×		×	×	×			×	10
Norway		×		×	×	×	×				×		×	×			×	×			×	11
Poland		×	×		×	×	×		×			×			×		×	×	×	×	×	13
Portugal		×									×	×				×						4
Rumania			×	×			×		×				×				×			×	×	8
Spain	×	×			×					×	×			×			×	×				8
Switzerland		×		×	×	×	×		×	×	×	×	×		×	×		×	×			14
Sweden		×		×	×	×	×		×	×	×	×	×			×	×		×	×	×	15
Turkey				×		×		×					×				×	×				6
U.S.S.R.			×	×	×	×	×		×				×		×			×			×	10
Yugoslavia		×		×			×				×	×	×		×			×		×		9

It is evident that bilateral trade is the predominant form of foreign trade in Europe at present (there is no record of any multilateral agreements having been reached), and the fact that some countries concluded a smaller number of agreements than others seems to be attributable rather to the longer duration of the ' emergency ' post-war period in some countries than to opposition in principle.

FUTURE PROSPECTS

Almost all European countries hope, as far as the general economic situation is concerned, to be back at ' normal ' in 1948-50 ; in many cases the 2, 3, 4 or 5 year plans drawn up envisage a higher economic activity than before the war. In the case of the U.S.S.R., where the devastation in the enemy-occupied areas was greater than in most other areas, the target figures for 1950 are as follows :

Planned output of the U.S.S.R. (1940=100).	*1950*
Industrial production	148
Coal output	135
Oil ,,	114
Electricity	170
Iron and steel	135
Machine industry	200
Merchant Navy	200

In order to co-ordinate the various reconstruction and development plans of European countries, the Sub-Commission recommends the establishment of a *European Commission* under the Economic and Social Council (a proposal since accepted) with the object of facilitating concerted action for the economic reconstruction of Europe, and of initiating and participating in measures necessary for the expansion of economic activity and for the development and integration of the European economy. The Commission is also to collect, analyse and publish economic and statistical material and undertake special investigations and studies of European economic problems. The various existing specialised agencies, such as the European Coal or Transport organizations, should ultimately be absorbed by the new *European Commission.*

For the short period the Sub-Commission recommends various measures for the removal of deficiencies caused by the war which require international collaboration. In particular it is recommended :

(*a*) to continue in some form the work of U.N.R.R.A;

(*b*) to establish a permanent housing organization which could serve as a clearing house for mutual information and also give help in the proper use of constructional materials in short supply;

(*c*) to ask countries deficient in labour, or which have a labour surplus, to prepare manpower budgets and to state the approximate numbers according to occupations; to provide facilities by which industrial and agricultural specialists could assist in the training of labour in Continental Europe;

(*d*) to create an international agency for the preparation of plans for the co-ordinated development of European power resources and the establishment of an international grid system;

(*e*) to allocate raw materials in short supply amongst European countries by a special body to be established.

It is evident that the U.N.O. Sub-Commission considers international collaboration in the economic sphere feasible, in spite of the differing economic systems and policies of the various countries. Hardly anybody would wish to disagree with this attitude or with the short-term recommendations referring to post-war reconstruction. It is possible, however, that the proposal for the new body, the European Commission, with the ultimate object of integrating the economy of Europe, has come a little too soon, though the authors of the proposal may point out that the International Labour Organization which was established with the double object of ' universal peace ' and ' social justice ' (and in the eyes of many failed in both) did nevertheless perform a most useful research and administrative role between the two wars. On the other hand, it is not certain whether the best way to achieve an integration of the European economy, if this is decided upon, is to proceed from the top by creating an overall organization, or from the bottom by cementing and linking up the existing, specialised international agencies, particularly in view of the changing economic systems in many European countries and the resulting fluidity which may last another few years. The creation and multiplication in the economic sphere of international bodies which require for their successful working a very high degree of international co-operation, may not necessarily speed up, but on the contrary, through failure, retard that co-operation.

H. Frankel.

TABULAR APPENDIX.

EDITORIAL NOTE

The following tables illustrate the economic developments in U.S.A. and individual European countries by presenting the trend of production, prices and foreign trade in recent months compared with typical war and pre-war years.

Explanation of symbols :

... the figure is not available.
( ) figures provisional or approximate.
— figure is negligible.

TABLE I. UNITED STATES

Index Nos. 1935–39=100[1]	Monthly Averages 1941	1943	1945	1946 July	Aug.	Sept.	Oct.	Nov.[2]
Income Payments—Index	138	213	239	251	252	246	255	259
Consumer Expenditures— Quarterly Index	124	150	179	...	...	218	...	...
Dept. Store Sales—Value Index	133	168	207	273	290	269	257	273
Vol. Index of Farm Mktgs.	115	133	137	155	139	111	143	160
Tot. Employmt.,[3] Millions	49.1	52.4	51.6	58.1	58.0	57.4	57.4	57.0
Unemploymt., Millions	5.0	1.1	1.1	2.3	2.0	2.1	2.0	1.9
Buildg. Contr. Awarded :								
Value Index	213	119	119	288	276	264	260	253
Vol. Index[4]	183	92	86	177	170	162	160	153
Ind. Production Index :								
Durable	201	360	275	202	208	212	214	214
Non-Durable	142	176	166	157	164	164	167	171
Minerals	125	132	137	146	144	146	145	137
Manufacturers' Orders—Index[5]	203	278	189	204	211	228	229	223
Manufacturers' Inventories : Index[5]	158	179	167	181	186	190	197	200
Wholesale Price Index :								
Farm Products	108	161	169	207	212	204	218	224
Foods	105	135	134	177	188	167	200	209
All others	110	119	123	135	137	138	142	148
Cost of Living Index	105	124	128	141	144	146	148	152
Facty. Av. Hrly. Earngs. cts.	73	96	102	109	111	113	113	114
Imports : Total, Mill $	279	282	344	433	425	378	394	481
from Europe Mill. $	24	...	...	70	63	58	64	...
Exports : Total, Mill. $	427	1,080	820	825	882	643	537	987
to Europe, Mill. $	128	...	...	380	354	234	169	...
Comm. Exports,[6] Mill. $	370	239	360	654	752	572	510	980[7]

Sources : Bureau of the Census for Employment and Unemployment ; *U.S. Department for Commerce* for Income Payments, Consumer Expenditures, Farm Marketings, Manufacturer's Orders and Inventories, and Foreign Trade ; *U.S. Department of Labor* for Prices and Wages ; *Federal Reserve Board* for Dept. Store Sales, Building Contracts and Ind. Production.

[1] All index numbers, except those of prices, of manufacturers' orders and inventories, are adjusted for seasonal variations.
[2] Partly provisional.
[3] Excluding Armed Forces.
[4] Value Index deflated with the (Engineering News Record) Index of Construction Costs.
[5] 1939=100.
[6] Excluding Lend Lease and U.N.R.R.A. supplies.
[7] Including U.N.R.R.A.

TABLE II. UNITED KINGDOM[1]

	Unit	Monthly Averages 1938	1945	1946	1946 Aug.	Sept.	Oct.	Nov.	Dec.
Production of :									
Steel (weekly av.) ...	1,000 tons	200	227	244	226	238	254	264	236
Cement[2]	1,000 tons	643	338	548	545	559	766[3]	571	517
*Bricks[2]	Millions	650	102	288	338	364	442	392	353
Passenger Cars ...	Thousands	28.0	1.4	18.3	20.1	20.6	26.8	25.3	26.8
Comm. Vehicles ...	Thousands	8.8	10.2	12.2	11.1	13.9	14.2	14.2	13.2
Merch. Vessels[4] ...	Mill. gross tons	1.0	1.46[5]	1.76[5]	1.69	1.70	1.68	1.76	1.76
Electricity	1,000 Mill. kwh	2.0	3.1	3.4	2.8	3.1	3.7	3.9	4.4
Gas (weekly av.) ...	Mill. th.	31.9	39.1	42.4	35.2	39.1	41.9	46.4	50.2
*Perman. Houses[6] ...	Thousands	30.0	0.22	4.12	4.56	6.29	7.45	7.35	9.00
*Employment : Total[7] ...	Millions	17.9	16.3	17.3	17.7	17.8	17.9	18.0	18.0
*Manuf. Ind.	Millions	6.8	6.8	6.6	6.6	6.8	6.9	7.0	7.0
*Manuf. Exports ...	Millions	1.0	0.41	1.31	1.36	1.41	1.42	1.44	1.46
*Unemployment[8] ...	Thousands	1,688	103	359	364	359	366	367	363
*Retail sales (weekly) ...	1938=100	100	118	128	139	140	144	151	180
Wholesale Prices ...									
Food	,,	100	163	163	164	163	162	161	161
ind. Prod.	,,	100	169	178	180	182	182	185	186
Cost of Living	,,	100	130	130	131	130	130	130	131
Weekly Wage Rates ...	Sept. '39 =100	...	150	162	164	164	164	164	165
Ret. Imports	£ Mill.	77	92	108	121	106	127	124	117
U.K. Exports	,,	39	33	76	78	71	91	92	83
Terms of Trade[9] ...	1938=100	100	93	95	97	96	94	93.5	93

Sources : Monthly Digest of Statistics ; Ministry of Labour Gazette ; Board of Trade Journal.

[1] Figures for items marked * refer to Great Britain.

[2] Figures from August 1946 onward relate to periods of four weeks. [3] Five weeks.

[4] Tonnage under construction, 100 gross tons and over. [5] End of December. [6] Completed.

[7] Including employers and self-employed, but excluding Forces, Auxiliary Services, Civil Defence, Police and private domestic service. All annual employment figures refer to mid-year.

[8] Number of insured workers registered as wholly unemployed and temporarily stopped. Mid-yearly or mid-monthly figures.

[9] Ratio of export prices to import prices.

Table III. France.

	Unit	Monthly averages 1938	1945	1946[1]	1946 Aug.	Sept.	Oct.	Nov.[1]	Dec.[1]
Production of :									
Coal[2]	Mill. m. tons	4.0	2.9	4.1	4.1	4.0	4.7	4.2	4.2
Electricity	000 Mill. KWH	1.5	1.4	1.8	1.7	1.8	2.0	2.0	...
Steel	Mill. m. tons	518	139	368	395	427	486	460	457
Cement	000 m. tons	290	127	276	286	323	376	380	...
Comm. Vehicles	Thousands	3.3	2.7	5.4	2.8	5.8	6.7	5.8	5.6
Passeng. Cars	,,	15.2	0.1	2.5	1.5	3.4	4.5	4.0	3.9
Cotton Fabr.	000 m. tons	12.1	2.7	8.3	6.4	9.8	11.0	9.6	...
Building Plans[3]	000 cbm.	706	151	...	351	378	425	...	...
Wagon loadings (daily)	Thousands	41	17	30	31	33	36	36	33
Employmt.[4]									
Numbers	1939=100	...	88	...	...	...	96	...	...
Hours worked	,, ,,	...	92	...	...	...	103	...	...
Wholesale Prices[5]	1938=100	100	366	607	654	673	749	743	771
Retail Prices[6]	,, ,,	100	393	645	730	785	858	856	865
Imports	000 Mill. frs.	3.8	4.6	19.5	20.3	18.4	23.5	19.2	22.5
Exports	,, ,, ,,	2.5	0.9	8.4	8.6	9.6	11.0	14.5	16.1

Source : Bulletin de la Statisque Générale de la France.

[1] Partly provisional ; covering the monthly figures to the last date available.

[2] Incl. lignite. [3] In Paris and 98 towns. [4] Wage-earners. Base : April 1939=100.

[5] 1941 weights. From August, 1946, includes some uncontrolled prices.

[6] Retail prices in Paris of 34 articles.

Table IV. Belgium.

	Unit	Monthly Averages 1938	1939	1945	1946 July	Aug.	Sept.	Oct.	Nov.
Production :									
Coal	Mill. m. tons	2.4	2.5	1.3	1.8	1.8	1.9	2.1	1.96
Steel	000 m. tons	190	259	61	201	198	198	236	220
Cement	,, ,, ,,	242	213	54	192	181	196	226	209
Electricity	Mill. KWH	440	466	382	488	484	517	589	582
Textile Ind.	1938=100	100	113	38	94	94	102	114	106
Paper Ind.	,,	100	120	26	124	112	105	127	118
Buildg. Activity[1]	Thousands	2.1	...	1.1	4.9	4.5	4.4	4.1	2.6
Unemployment[2]	,,	174	195	146	48	53	37	37	43
Imports	000 mill. frs.	1.9	1.6	1.1	4.0	5.2	4.6	6.4	6.6
Exports	,, ,, ,,	1.8	1.8	0.3	2.9	2.2	3.0	3.7	3.3

Source : Institut National de Statistique ; Banque Nationale de Belgique.

[1] Number of units newly constructed and reconstructed. [2] Daily average.

Table V. Netherlands.

Index Nos. 1938=100	Unit	Monthly Averages 1939	1945	1946	1946 Aug.	Sept.	Oct.	Nov.	Dec.
Production :									
Coal	Index	96	38	62	59	67	72	71	63
Electricity	,,	111	61[1]	...	102	113	136	145	...
Cement	,,	119	55	89	98	101	108	96	74
Cast iron	,,	...	20[2]	...	58	66	88	81	...
Butter	,,	107	49[3]	...	82	68	58	49	...
Cheese	,,	96	36[3]	...	87	63	69	38	...
Unemployed	000's	236	98[4]	50	41	39	38	39	...
Wage rates :	1938–39 =100								
Industry		101	150[5]	...	163	166	164	...	...
Agriculture	,,	100	225[5]	...	241	241	...	...	...
Imports	Mill. fl.	126	...	203[4]	207	199	211	239	223
Exports	,, ,,	81	16	66	60	92	110	126	128

Source : Central Bureau Voor De Statistick ; Rotterdamsche Bankvereeniging.

[1] Average May-December. [2] July.

[3] Average July-December. [4] Average June-December. [5] December.

TABLE VI. DENMARK.

Index Nos. : 1938=100.	Unit	Monthly Averages 1939	1945	1946	1946 Aug.	Sept.	Oct.	Nov.	Dec.
Production :									
Industrial ...	Index	105	79	96	99	101	103	104	105
Animal Products	,,	103	68	75	73	74	75	73	72
Butter ...	000 m. tons	15.2	11.0	11.7	14.3	12.6	11.9	10.3	9.5
Bacon ...	,, ,,	21.3	14.3	15.7	11.5	12.9	17.2	15.3	17.3
Elec. (consumptn.)	Mill. KWH	69[1]	76	98	96	100	111	117	118
Wholesale Prices	Index	105	190	188	191	192	197	198	198
Cost of Living ...	,,	101	159	...	157	...	...	159	...
Imports ...	Mill. Kr.	145	58	236	315	297	331	284	315
Exports ...	,,	132	75	134	147	155	184	183	194

Source : Danmarks Statistics, Statistike Efterretninger.

[1] 1938.

TABLE VII. NORWAY.

Index Nos. : 1938=100.	Unit	Monthly Averages 1939	1945	1946 July	Aug.	Sept.	Oct.	Nov.
nd. Production :								
All Industr.	Index	107	69	75	102	108	108	115
Home Mkt. Ind. ...	,,	108	81	81	118	127	125	134
Export Ind. ...	,,	103	45	62	68	69	72	74
Electricity gen.	Mill. KWH	851	820	812	874	916	1061	1057
Retail Turnover ...	Vol. Ind.	103	72	104	107	109		
Cost of Living	Index	101	155	159	160	160	160	161
Imports	Mill. Kr.	114	100	153	210	186	220	259
Exports	,, ,,	67	27	118	92	117	120	112

Source : Central Bureau of Statistics.

TABLE VIII. SWEDEN.

Index Nos. 1939=100	Unit	Monthly Averages 1939	1945	1946[1]	1946 Aug.	Sept.	Oct.	Nov.	Dec.
Production :									
All Industries ...	Index	100	85	103	101	102	104	105	105
Iron and Steel Ind.	,,	100	104	...	109	105	100	...	...
Engineer. Ind. ...	,,	100	78	...	124	126	127	...	...
Paper Ind.	,,	100	66	...	90	98	100	...	...
Textile Ind. ...	,,	100	96	...	91	92	93	...	...
Food Ind.	,,	100	94	...	97	96	95	...	...
Unemployment[2] ...	000's	15.4	8.8	5.3	2.3	2.4	2.8	3.6	...
Cost of living ...	Index	100	149	149	149	149	150	150	...
Imports	Mill. Kr.	204	91	261	290	296	327	345	331
Exports	,, ,,	157	147	210	193	234	238	220	237

Source: Skandinavska Banken, Quarterly Review. United Nations, Monthly Bulletin.

[1] Eleven or twelve months' average.

[2] Applicants for relief. Employment Exchange Statistics.

TABLE IX. SWITZERLAND.

Index Nos. 1938=100	Unit	Monthly Averages 1938	1945	1946	1946 Aug.	Sept.	Oct.	Nov.	Dec.
Employment :									
All Industries ...	Quart. Index	100	110	123	...	124	...	...	128
Building Ind. ...	,,	100	89	108	...	121	...	...	102
Metal Ind. ...	,,	100	122	138	...	138	...	...	142
Chemical Ind. ...	,,	100	130	157	...	162	...	...	162
Textile Ind. ...	,,	100	76	87	...	87	...	...	93
Food Ind.		100	106	120	...	123	...	...	126
Electricity gen.[1] ...	Mill. KWH	448	666	696	795	787	710	635	608
Building Permits :									
New Flats	Numbers	703	752	1043	817	1051	881	1024	1166
Factories[2]	,,	93	167	267	...	299[3]	...	...	273[4]
Tourism[5]	Thous.	630	264	506	971	695	479	356	491
Cost of Living ...	Index	100	152	152	151	151	154	154	154
Imports	Mill. frs.	134	102	285	284	255	304	331	367
Exports	,, ,,	110	123	223	217	237	269	268	264

Source: Schweiz. Nationalbank ; Department Fédéral de l'Economie Publique.

[1] Public power stations.

[2] Incl. extensions and structural changes.

[3] Monthly average, 3rd quarter.

[4] Monthly average, 4th quarter.

TABLE X. ITALY.

	Unit	Mthly Aver. 1939	1945	1946 July	Aug.	Sept.	Oct.	Nov.
Production :								
Electricity	000 Mill. KWH	1.3	0.9	1.4	1.4	1.5	1.4	1.3
Steel	000 m. tons	189	34	113	111	125	134	...
Coal Imports	,, ,, ,,	1,100[1]		514	896	677	314	334
Cost of living	1938=100	...	...	2,094	1,929	1,954	2,203	2,448
Imports[2]	000 Mill. lire	0.9	...	7.6	10.1	10.4	9.6	...
Exports	,, ,, ,,	0.9	...	5.4	7.4	5.7	6.9	...

Source: Instituto Centrale di Statistica.

[1] Average 1935, 1937 and 1938. [2] Incl. U.N.R.R.A.

TABLE XI. FINLAND.

Index Nos. 1939=100	Unit	Mthly. Aver. 1939	1945	1946 July	Aug.	Sept.	Oct.	Nov.
Production :								
Home Ind.	Index	100	56	66	68	70	...	...
Export Ind.	,,	100	51	70	67	75	74	75
Electricity	Mill. KWH	259	247	207	207	228	256	265
Cement (Consump.) ...	Index	100	52	...	...	59[1]	...	...
Wholesale Prices	,,	100	386	619	624	631	634	634
Cost of Living	,,	101[2]	282	464	466	470	470	468
Imports	Mill. Mark.	631	572	2986	2757	2387	2316	2274
Comm. Exports	,,	643	436	2071	2505	2392	3243	2907
Reparation Deliv. ...	,,	...	585	747	692	856	660	529

Source: Unitas, Quarterly Review of Trade Conditions in Finland.

[1] Third quarter. [2] 1938–9=100.

TABLE XII. POLAND.

Monthly figures or averages	Unit	1938[1]	1945 April-Dec.	Aug.	1946 Jan.-Aug.	Aug.	Sept.
Coal	Mill m. tons	3.2	2.2	2.4	3.7	4.2	4.2
Pig Iron	1000 m. tons	74	24	29	61	66	61
Steel	,,	120	54	61	88	98	100
Cement	,,	143	33	38	107	153	154
Rails	,,	...	6.5	6.6	11.2	13.6	18.5
Paper	,,	...	3.4	3.3	11.0	12.6	14.6
Electricity[2] ...	1000 KWH	319	418	...	446	462	468

Source: Central Statistical Office of the Republic of Poland.

[1] Pre-war frontiers. [2] Public power stations.

TABLE XIII. CZECHOSLOVAKIA.

	Unit	Mthly. Aver. 1937	1945	1946 July	Aug.	Sept.	Oct.	Nov.
Production :								
Coal	000 m. tons	1398	952	1190	1228	1140	1265	1270
Electricity	Mill. KWH	334	341	413	458	463	520	468
Pig iron	000 m. tons	140	48	80	83	89	89	96
Steel	,,	192	79	126	133	152	155	169
Wholesale Prices[1] ...	Jan.-March 1939=100	...	154	280	292	294	302	301
Cost of Living[2]	Jan.-June 1939=100	...	168	303	305	302	303	303
Imports	Mill. Kr.	915	76[3]	758	900	977	1267	1349
Exports	,,	996	49[3]	1380	1235	1450	1811	1869

[1] Bohemia, Moravia and Silesia ; from January 1946, some products for Slovakia.

[2] At Prague. [3] May to December.

TABLE XIV. HUNGARY.

	Unit	Mthly Aver.		1946				
		1937	1938	June	July	Aug.	Sept.	Oct.
Production of :								
Coal	000 m. tons	76	87	48	56	61	59	73
Lignite	,, ,,	671	693	392	428	464	478	574
Pig iron	,, ,,	30	28	15	16	17	18	20
Bauxite	,, ,,	44	45	6	8	14	16	16
Petroleum	,, ,,	—	3.5	51	64	57	54	55
Wagon loadings	thousands	108	114	38	44	48	56	76
Imports[1]	Mill. fl.	140	119	10	17	9	26	57
Exports[1]	,, ,,	171	151	18	27	34	36	60

Source: Office Central Hongrois de Statistique.

[1] The monthly values June–August 1946 are ' volumes ' calculated on the basis of unit values of foreign trade in 1938. The values originally expressed in pengoes were converted into florins at the rate 1 p . = 3.48 fl.

TABLE XV. BULGARIA.

Index Nos. 1939=100	Unit	Mthly. Av.		1946				
		1939	1945	July	Aug.	Sept.	Oct.	Nov.
Industrial Production :	Index	100	106	120	136	138	150	134
Investment Goods... ...	,,	100	81	125	143	124	125	131
Food, Drink, Tobacco ...	,,	100	42	62	137	222	243	146
Other Cons. Ind.	,,	100	112	130	134	124	135	132
Electricity gen.	Mill. KWH	22	33	35	36	34	40	41
Wholesale prices[1]	Index	100	550	630	646	652	656	663
Cost of living	,,	100	509	567	565	571	583	596
Imports[2]	Mill. Leva	433	485	2412	1088	1745	1524	1144
Exports	,,	505	1019	3125	1521	1699	2013	823

Source: Direction Générale de la Statistique, Bulletin Mensuel (Sofia).

[1] 72 commodities.

[2] Incl. bullion and specie.